

**REMARKS****I. General**

Claims 1-44 are pending in the present application. The issues outstanding with respect to the present Office Action are as follows:

- Abstract was objected to because it contains the language “said cardiac stress.”
- The Information Disclosure Statement was objected to because it fails to comply with 37 CFR 1.98(a)(2).
- Claims 1-9, 11, 12, 14, 18-32, 34, 36 and 40-44 have been rejected under 35 U.S.C. §102(b) as anticipated by Marumoto et al. (hereinafter “*Marumoto*”).
- Claims 1, 13, 23 and 35 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Marumoto* and further in view of Tavel et al., Chest 2001; 119: 907-925 (hereinafter “*Tavel*”).
- Claims 1, 9, 10, 23, 31, 32 and 33 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Marumoto* and further in view of *Tavel*.
- Claims 1, 15-17, 23 and 37-39 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Marumoto* and further in view of Raza et al., Int. J. Cardio. 2001; 31: 157-167 (hereinafter “*Raza*”).

Applicant respectfully traverses the outstanding rejections and requests reconsideration and withdrawal thereof in light of the remarks contained herein.

**II. Objections****A. Abstract**

The abstract of the disclosure is objected to because it contains the language “said cardiac stress.” In response Applicant has amended the abstract to read “the cardiac stress.” Accordingly, Applicant requests withdrawal of the objection.

**B. Information Disclosure Statement**

The Information Disclosure Statement filed on May 18, 2005 was objected to because it fails to comply with 37 CFR 1.98(a)(2) which requires a legible copy of each cited foreign document, each non-patent literature publication or that portion which caused it to be listed, and all other information or that portion which caused it to be listed. In response Applicant has included a legible copy in English of each non-patent literature publication and each foreign document required by the Examiner, citations BA, CC, CD, CE, CF, CG, CH, CK, CL, CM, CO, CQ, CR, CS, CT, CU, CV, CX, CZ, CA1 and CB1. A copy of the Information Disclosure Statement filed on May 18, 2005 is also included. Accordingly, Applicant requests withdrawal of the objection and consideration of the documents submitted.

**III. Issues Under 35 U.S.C. § 102(b)**

Claim 1 and its dependent claims 2-9, 11, 12, 14 and 18-22 and claim 23 and its dependent claims 24-32, 34, 36 and 40-44 stand rejected under 35 U.S.C. §102(b) as anticipated over *Marumoto*. To anticipate a claim under 35 U.S.C. § 102, a reference must teach every element of the claim, see M.P.E.P. § 2131. The applied reference does not teach every element of the claims. Accordingly, Applicant respectfully traverses this rejection.

**A. Independent Claim 1**

Claim 1 recites “measuring the marker related to BNP level immediately post cardiac stress.” *Marumoto* teaches measuring BNP at rest, at peak exercise and 30 minutes after exercise, see pg. 552. Applicant asserts that neither of the three different instances in which BNP is measured in *Marumoto* is immediately post cardiac stress.

Additionally, claim 1 recites “calculating a **relative change** in the marker related to the BNP level.” The “relative change in BNP level” is defined as “the change in the BNP level immediately after exercise as compared to the baseline level,” see spec [0050]. A “baseline BNP” level is defined as “the BNP level before a specific event,” for example, “the BNP level after exercise is compared to a baseline BNP level before exercise,” see [0050]. On page 4 of the Action, the Examiner acknowledges that *Marumoto* teaches “a method of measuring BNP . . .” Applicant asserts that *Marumoto* does not teach measuring a relative change in BNP level (a marker related to BNP).

Furthermore, claim 1 recites the limitation “wherein coronary artery disease is detected in said mammal if the **relative change** in marker related to BNP after cardiac stress is greater than a predetermined clinically effective threshold value.” As stated above, *Marumoto* teaches measuring BNP levels but does not teach measuring a relative change in BNP level. Because all the claim limitations are not met by *Marumoto*, Applicant respectfully requests withdrawal of the rejection.

#### **B. Dependent Claims 2-9, 11, 12, 14 and 18-22**

Claims 2-9, 11, 12, 14 and 18-22 depend from claim 1. Accordingly, each of these dependent claims is asserted to be patentable over the 35 U.S.C. § 102 rejections of record at least for the reasons set forth above with respect to claim 1.

#### **C. Independent Claim 23**

Claim 23 recites “measuring the marker related to BNP level immediately post cardiac stress.” *Marumoto* teaches measuring BNP at rest, at peak exercise and 30 minutes after exercise, see pg. 552. Applicant asserts that neither of the three different instances in which BNP is measured in *Marumoto* is immediately post cardiac stress.

Additionally, claim 23 recites “calculating a **relative change** in the marker related to the BNP level.” The “relative change in BNP level” is defined as “the change in the BNP level immediately after exercise as compared to the baseline level,” see spec [0050]. A “baseline BNP” level is defined as “the BNP level before a specific event,” for example, “the BNP level after exercise is compared to a baseline BNP level before exercise,” see [0050]. On page 4 of the Action, the Examiner acknowledges that *Marumoto* teaches “a method of measuring BNP . . .” Applicant asserts that *Marumoto* does not teach measuring a relative change in BNP level (the marker related to BNP).

Furthermore, claim 23 recites the limitations “wherein the **relative change** in the marker related to BNP level correlates with severity of coronary artery disease . . .” and “wherein the higher the relative change, the greater the severity of coronary artery disease.” As stated above, *Marumoto* teaches measuring BNP levels but does not teach measuring a relative change in BNP level. Because all the claim limitations are not met by *Marumoto*, Applicant respectfully requests withdrawal of the rejection.

**D. Dependent Claims 24-32, 34, 36 and 40-44**

Claims 24-32, 34, 36 and 40-44 depend from claim 23. Accordingly, each of these dependent claims is asserted to be patentable over the 35 U.S.C. § 102 rejections of record at least for the reasons set forth above with respect to claim 23.

**IV. Issues Under 35 U.S.C. § 103(a)****A. The 35 U.S.C. § 103 Rejections Based Upon *Marumoto* in view of *Tavel***

Claims 1, 9, 10, 13, 23, 31, 32, 33 and 35 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Tavel*. To render a claim unpatentable under 35 U.S.C. § 103, all the claim limitations must be taught or suggested by the prior art, M.P.E.P. § 2143.03. Additionally, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious, see MPEP § 2143.03. The 35 U.S.C. § 103 rejections on record do not meet the foregoing criteria. Accordingly, Applicant respectfully traverses this rejection.

**1. Claims 1, 13, 23 and 35**

Claims 1, 13, 23 and 35 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Tavel*. The Examiner rejected claims 1 and 23 under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Tavel*, see page 6 of the Action, but presented no explanations or arguments to support the rejections. As discussed above, *Marumoto* does not meet the claim limitations of claims 1 and 23. Applicant has not been able to identify the limitations absent from *Marumoto* in the disclosure of *Tavel*, and the Examiner has not shown otherwise. Because these claim limitations are not met by *Marumoto* nor *Marumoto* in view of *Tavel*, the 35 U.S.C. § 103 rejections of claims 1 and 23 fail. Applicant respectfully requests withdrawal of the rejection.

As discussed above, *Marumoto* does not meet the claim limitations of claims 1 and 23. Claim 13 is dependent on claim 1 and includes all of the limitations of claim 1. Claim 35 is dependent on claim 23 and includes all of the limitations of claim 23. Applicant has not been able to identify the limitations absent from *Marumoto* in the disclosure of *Tavel*, and the Examiner has not shown otherwise. Because these claim limitations are not met by

*Marumoto* nor *Marumoto* in view of *Tavel*, the 35 U.S.C. § 103 rejections of claims 13 and 35 fail. Applicant respectfully requests withdrawal of the rejection.

## 2. Claims 1, 9, 10, 23, 31, 32 and 33

Claims 1, 9, 10, 23, 31, 32 and 33 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Tavel*. The Examiner rejected claims 1 and 23 under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Tavel*, see page 7 of the Action, but presented no arguments or explanations to support the rejections. As discussed above, *Marumoto* does not meet the claim limitations of claims 1 and 23. Applicant has not been able to identify the limitations absent from *Marumoto* in the disclosure of *Tavel*, and the Examiner has not shown otherwise. Because these claim limitations are not met by *Marumoto* nor *Marumoto* in view of *Tavel*, the 35 U.S.C. § 103 rejections of claims 1 and 23 fail. Applicant respectfully requests withdrawal of the rejection.

As discussed above, *Marumoto* does not meet the claim limitations of claims 1 and 23. Claims 9 and 10 are dependent on claim 1 and include all of the limitations of claim 1. Claims 31-33 are dependent on claim 23 and include all of the limitations of claim 23. Applicant has not been able to identify the limitations absent from *Marumoto* in the disclosure of *Tavel*, and the Examiner has not shown otherwise. Because these claim limitations are not met by *Marumoto* nor *Marumoto* in view of *Tavel*, the 35 U.S.C. § 103 rejections of claims 9, 10 and 31-33 fail. Applicant respectfully requests withdrawal of the rejection.

## B. The 35 U.S.C. § 103 Rejections Based Upon *Marumoto* in view of *Raza*

Claims 1, 15-17, 23 and 37-39 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Raza*. The Examiner rejected claims 1 and 23 under 35 U.S.C. §103(a) as unpatentable over *Marumoto* and further in view of *Raza*, see page 7 of the Action, but presented no arguments or explanations to support the rejections. As discussed above, *Marumoto* does not meet the claim limitations of claims 1 and 23. Applicant has not been able to identify the limitations absent from *Marumoto* in the disclosure of *Raza*, and the Examiner has not shown otherwise. Because these claim limitations are not met by *Marumoto* nor *Marumoto* in view of *Raza*, the 35 U.S.C. § 103 rejections of claims 1 and 23 fail. Applicant respectfully requests withdrawal of the rejection.

As discussed above, *Marumoto* does not meet the claim limitations of claims 1 and 23. Claims 15-17 are dependent on claim 1 and include all of the limitations of claim 1. Claims 37-39 are dependent on claim 23 and include all of the limitations of claim 23. Applicant has not been able to identify the limitations absent from *Marumoto* in the disclosure of *Raza*, and the Examiner has not shown otherwise. Because these claim limitations are not met by *Marumoto* nor *Marumoto* in view of *Raza*, the 35 U.S.C. § 103 rejections of claims 15-17 and 37-39 fail. Applicant respectfully requests withdrawal of the rejection.

#### V. Conclusion

In view of the above, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2375, under Order No. HO-P02680US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

By

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